ATTACHMENT 34

DAAE07-01-R-S001

19 MAY 2000

DEPARTMENT OF THE ARMY
U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND
SOLDIER SYSTEMS CENTER
KANSAS STREET
NATICK, MA 01760-5017

REPLY TO
ATTENTION OF

AMSSB-RAD-AD (N)

19 MAY 2000

MEMORANDUM FOR Commander, DOD Project Manager-Medium Tactical Vehicles, ATTN: SFAE-GCSS-W-MTV, (Mr. John Hretz), Warren, MI 48397-5000

SUBJECT: Helicopter External Air Transport Certification of the Family of Medium Tactical Vehicles

1. References:

a. Facsimile, PM-MTV, Mr John Hretz, 3 May 00, subject: Physical Characteristics of the Family of Medium Tactical Vehicles.

b. Memorandum, PM-MTV, Mr John Hretz, 2 May 00, subject: Physical Characteristics of the Family of Medium Tactical Vehicles.

c. Memorandum, PM-MTV, Mr John Hretz, 2 May 00, subject: Helicopter External Air Transport Certification of the Family of Medium Tactical Vehicles.

d. Memorandum, U.S. Army Transportation Center, ATZF-TW, 14 Nov 95, subject: FMTV Specification Change.

2. As requested in reference 1c, the U.S. Army Natick Soldier Center (NSC), Aerial Delivery Engineering Support Team (ADEST), has evaluated five variants in the Family of Medium Tactical Vehicles, and certified them for sling loading in dual point as shown the table following:

		CH-47D	CH-47D	CH-53	CH-53
Model #	Description	Weight (lbs.)	Airspeed (KIAS)	Weight (lbs.)	Airspeed (KIAS)
M1078A1	LMTV Cargo	17,740-23,200	110	No Certification	Required
M1079A1	LMTV Shopvan	18,997-23,200	110		
M1088A1	MTV Tractor	19,740	110	19,740	110
M1090A1	MTV Dump	22,218-23,200*	100	22,218-24,817	100
M1083A1	MTV Cargo	22,922-23,200	110	22,922-28,000	110

*this is less than the Vehicle Curb Weight, limiting the amount of fuel, BII etc that can be transported.

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3. Certification is contingent upon the following:

a. Item weights, Center of Gravity (CG), dimensions, configuration and other pertinent data remain identical to those used in the tests and analysis.

b. The item is rigged in dual point in accordance with rigging procedures published in FM 10-450-5 on page 2-50 to page 2-53, substituting the A1 version for the listed version of the same model; except for the M1079A1, which is rigged in accordance with procedures for the M1078 on same pages as above.

4. Certification is based upon the following:

a. Engineering evaluation of the load characteristics (weight to projected frontal area ratio and weight distribution) and engineering analysis of the lifting provisions for helicopter flight environment.

b. Flight tests of the previous version, which is similar to the A1 model, have demonstrated stable flight at the airspeed noted in paragraph 2.

5. Rigging procedures for the present Family of Medium Tactical Vehicles will be amended by the U.S. Army Quartermaster Center and School, Ft Lee, VA to include the above certified items in the appropriate helicopter sling load rigging manuals.

6. POC for this effort is Mr. Jeffrey Campbell at DSN 256-5280, FAX DSN 256-4716.

JOSE A. MILETTI
Aerial Delivery Engineering Support Team
U.S. Army Natick Soldier Center

CF:
CDR, U.S. Army Quartermaster Center and School, ATTN: ATSM-ABN-FS (Mr. Gary Baker), Fort Lee, VA 23801-1502